

PR#9833

CRUTCHER, JAMES

12/20/2007

1

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE NORTHERN DISTRICT OF OKLAHOMA
3

4 STATE OF OKLAHOMA, ex rel.
5 W. A. DREW EDMONDSON,
6 in his capacity as
7 ATTORNEY GENERAL OF THE
8 STATE OF OKLAHOMA and
9 OKLAHOMA SECRETARY OF THE
10 ENVIRONMENT C. MILES TOLBERT,
11 in his capacity as the TRUSTEE
12 FOR NATURAL RESOURCES FOR THE
13 STATE OF OKLAHOMA,

14 Plaintiffs,

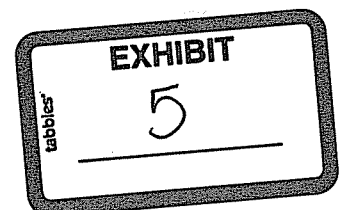
15 Vs. No. 05-CV-0329 GKF-SAJ

16 TYSON FOODS, INC., TYSON
17 POULTRY, INC., TYSON
18 CHICKEN, INC., COBB-VANTRESS,
19 INC., AVIAGEN, INC., CAL-MAINE
20 FOODS, INC., CAL-MAINE FARMS,
21 INC., CARGILL, INC., CARGILL
22 TURKEY PRODUCTION, LLC,
23 GEORGE'S, INC., GEORGE'S FARMS,
24 INC., PETERSON FARMS, INC.,
25 SIMMONS FOODS, INC., and WILLOW
BROOK FOODS, INC.,

Defendants.

VIDEOTAPED DEPOSITION OF JAMES CRUTCHER, M.D.
TAKEN ON BEHALF OF THE DEFENDANTS
ON DECEMBER 20, 2007, BEGINNING AT 9:38 A.M.
IN OKLAHOMA CITY, OKLAHOMA

VIDEOTAPED BY: STESHA FERGUSON
REPORTED BY: DANIEL LUKE EPPS, CSR, RPR



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1 APPEARANCES:

2
3 Appearing on behalf of the PLAINTIFFS:

4
5 DAVID P. PAGE, Attorney at Law
6 Bell Legal Group
7 P.O. Box 1769
8 Tulsa, Oklahoma 74101
9 (918) 398-6800
dpage@edbellllaw.com

10
11 ROBERT A. NANCE, Attorney at Law
12 Riggs, Abney, Neal, Turpen, Orbison &
13 Lewis
14 5801 N. Broadway, Suite 101
Oklahoma City, Oklahoma 73118
(405) 843-2913
rnance@riggsabney.com

15 Appearing on behalf of the DEFENDANTS TYSON FOODS,
16 INC., TYSON POULTRY, INC., TYSON CHICKEN, INC. &
COBB-VANTRESS, INC.:

17 ROBERT GEORGE, Attorney at Law
18 Kutak Rock
19 The Three Sisters Building
20 214 West Dickson Street
21 Fayetteville, Arkansas 72701
(501) 975-3000
robert.george@kutakrock.com

22 Appearing on behalf of the DEFENDANT PETERSON FARMS:

23 A. SCOTT MCDANIEL, Attorney at Law
24 McDaniel, Hixon, Longwell & Acord
25 320 South Boston Avenue, Suite 700
Tulsa, Oklahoma 74119
(918) 382-9200
smcdaniel@mhla-law.com

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1 APPEARANCES CONTINUED:

2
3 Appearing on behalf of the DEFENDANT SIMMONS FOODS,
4 INC.:

5 JOHN R. ELROD, Attorney at Law
6 VICKI BRONSON, Attorney at Law
7 211 E. Dickson Street
8 Fayetteville, Arkansas 72701
9 (479) 582-5711
10 jelrod@cwlaw.com
11

12 Appearing on behalf of the DEFENDANTS CARGILL, INC. &
13 CARGILL TURKEY PRODUCTION, LLC:

14
15 LESLIE SOUTHERLAND, Attorney at Law
16 Rhodes, Hieronymus, Jones, Tucker &
17 Gable
18 ONEOK Plaza
19 100 West 5th Street, Suite 400
20 Tulsa, Oklahoma 74103
21 (918) 582-1173
22 sjsoutherland@rhodesokla.com

23
24 Appearing by telephone on behalf of the DEFENDANT
25 WILLOW BROOK FOODS, INC.:

26
27 DAVID BROWN, Attorney at Law
28 Lathrop & Gage
29 314 East High Street
30 Jefferson City, Missouri 67101
31 (573) 761-5006
32 dbrown@lathropgage.com

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1 APPEARANCES CONTINUED:

2
3 Appearing by telephone on behalf of the DEFENDANTS
4 CAL-MAINE FOODS, INC., CAL-MAINE FARMS, INC.:

5 BOB SANDERS, Attorney at Law
6 Young Williams, P.A.

7 P.O. Box 23059,

8 Jackson, Mississippi 39225-3059

9 (601) 360-9013

10 rsanders@youngwilliams.com

11
12
13 ROBERT P. REDEMANN, Attorney at Law
14 Perrine, McGivern, Redemann, Reid,
15 Berry & Taylor

16 1437 South Boulder Avenue

17 Suite 620

18 P.O. Box 1710

19 Tulsa, Oklahoma 74101

20 (918) 382-1400
21
22
23
24
25

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1 zoonotic disease very common in the animal
2 kingdom. Again, humans more often can be a
3 carrier, a long term carrier of salmonella than
4 with campylobacter, again, to my recollection.

5 Q Can campylobacter be a foodborne
6 disease?

7 A Yes.

8 Q Is that the most common source that
9 you see in the health department is a foodborne
10 disease?

11 A I would think so. That food is a
12 medium for transmission is the more common, I
13 would think that Dr. Bradley this afternoon may
14 be able to shed more light on that.

15 Q What about salmonella? That can
16 also be a foodborne disease?

17 A Yes.

18 Q Is that the most common source that
19 the health department sees of salmonella is a
20 foodborne disease?

21 A I would, again, think so as opposed
22 to waterborne.

23 Q Yes, sir.

24 A I would think the foodborne route,
25 yes, is the more commonly identified, again, to

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1 the best of my knowledge.

2 Q Grandma's bad deviled eggs at the
3 picnic?

4 A There you go.

5 Q Yeah. What about staphylococcus?

6 A Right.

7 Q Can that also be foodborne?

8 A Yes.

9 Q Is that the most common source that
10 the health department sees is staph infections as
11 a foodborne disease?

12 A You know, I really couldn't tell
13 you. Staph is a more common organism in the
14 environment. Humans carry it, you know, on their
15 skin, on their hands, and their nose. I really
16 couldn't say, but foodborne is the most common we
17 see it. I'd have to say I'm not sure.

18 Q Is there a good chance I've got a
19 staph bacteria on my hands right now?

20 A Uh-huh. Sure.

21 Q Okay.

22 A Or that some of us do in this room
23 anyway.

24 MR. GEORGE: Don't name names,
25 please.

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1 Q And why is that particular strain
2 the reported strain?

3 A Well, it's a type. There's many,
4 many types of E. coli bacteria. This is one that
5 has been identified as a more serious threat to
6 human health in the last many years associated
7 initially with undercooked hamburger meat, and
8 especially because it has the potential to cause
9 severe disease in children. It can, again, be a
10 self-limited diarrheal disease in adults most of
11 the time, but it can cause a more serious disease
12 called hemolytic uremic syndrome in children
13 which can either kill them or leave them with
14 fairly severe deficits as a result of the
15 infection, so it gets more attention.

16 Q And what does EHEC mean?

17 A Enterohaemorrhagic E. coli.

18 Q Okay. Is that something different
19 from zero -- O157:H7?

20 A Well, O157:H7 is a type of
21 enterohaemorrhagic E. coli. O157:H7 is, again,
22 just a molecular biological designation of the
23 many types of these organisms.

24 Q But when this particular column says
25 "Or Other EHEC" --

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1 are there people who I'm calling field
2 investigators who go out and ask questions,
3 gumshoes?

4 A In the county health departments
5 there are what's called communicable disease
6 nurses. They're really not epidemiologists, but
7 they are communicable disease nurses that go by
8 protocols to collect data, and then the state
9 epidemiologists really focus at the state health
10 department and do not get involved in every, you
11 know, disease that's reported to us. Generally
12 only when there is an outbreak or a disease of
13 concern arises, whatever that reason for that is.

14 Q Since you've been involved with the
15 Oklahoma Health Department, has there ever been
16 a, quote, "outbreak," end quote, associated with
17 the Illinois River with which the health
18 department has been concerned?

19 A Not that I'm aware of.

20 Q And since you've been with the
21 health department, has there ever been -- what's
22 the second word you used?

23 A An increase in incidence of disease
24 or --

25 Q Yeah. Has there ever been something

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1 like that in the Illinois River Basin with which
2 the health department has been concerned?

3 A Not that I'm aware of. An outbreak,
4 there's not been an outbreak or a disease --
5 elevated levels of disease that have occurred as
6 a result of, you know, being exposed to the
7 Illinois River that I'm aware of.

8 Q All right, sir. So let me return to
9 this issue and see if I can understand what
10 happens. Let's assume -- I'm going to use Jack
11 In The Box because it just happens to be
12 something I remember. Poor Jack In The Box. I
13 don't know if they exist anymore.

14 A I don't know. I haven't seen any.

15 Q I don't see them for some reason,
16 but if you had that kind of a Jack In The Box
17 outbreak, whether that was salmonella or E. coli,
18 whatever it was, are there people that you send
19 out into the field to start interviewing these
20 people who have the disease so that you can
21 actually come to the conclusion that was related
22 to Jack In The Box at 13th and Elm?

23 A Yes.

24 Q Okay. Let's take a break.

25 THE VIDEOGRAPHER: We are off the

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1 people aware of the authority that we have that
2 is given to us to do so. Generally that works.
3 If it doesn't, then, you know, we have to proceed
4 through stronger forces ultimately, you know,
5 utilizing court power if necessary.

6 Q And to your knowledge, Doctor, has
7 there ever been a health advisory, my words, and
8 I want you to tell me if that's the wrong
9 terminology, issued by the health department in
10 regard to the safety of the waters of the
11 Illinois River or its tributaries?

12 A Not to my knowledge.

13 Q All right, sir.

14 A Not from the health department.

15 Q Okay. Well, I've got to ask you
16 about that answer. By anybody else to your
17 knowledge?

18 A Not to my knowledge, but I just
19 wanted to say the health department hasn't.
20 Whether the Department of Environmental Quality
21 or Water Resources Board has, I can't say. The
22 health department has not.

23 Q All right. Did I use the right
24 term, health advisory?

25 A Health advisory, yeah.

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1 Doctor?

2 A Well, from looking at this graph,
3 can I say that there is evidence that there is a
4 direct relationship between the application of
5 chicken litter in the Illinois River Watershed
6 and in campylobacteriosis? No, I can't say that.

7 Q Okay. That's my question. Let me
8 hand you what's been marked as C-4 which is the
9 same exercise with E. coli O157:H7.

10 (Exhibit C-4 marked for identification)

11 A Uh-huh.

12 Q And I have the same question, of
13 course, and that is given the information on this
14 bar graph, again, utilizing the Oklahoma report
15 and statistics for the four counties through
16 which the Illinois River and its tributaries
17 flow, will you agree with me that these
18 statistics have no utility in attempting to prove
19 a cause and effect relationship between the land
20 application of chicken litter in the Illinois
21 River Basin and incidences of E. coli?

22 MR. PAGE: Object to the form.

23 THE WITNESS: Well, there's no
24 evidence to suggest that there is a direct cause
25 and effect relationship between those two -- that

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1 variable and that outcome. Same breath, I can't
2 say for both of these that I can say that this is
3 proof that there isn't an association or that
4 there isn't -- that some of these cases were
5 caused by that. So I can't conclude either way
6 that it either confirms or precludes that outcome
7 from occurring. There's not evidence to show
8 that there is a direct cause and effect
9 relationship.

10 Q (BY MR. ELROD) Okay. I think what
11 you're saying, and I'm going to ask you if you
12 agree with this, that these statistics standing
13 alone are useless in terms of determining whether
14 there is a cause and effect relationship between
15 the land application of chicken litter in the
16 Illinois River Basin and incidences of E. coli?

17 A I'm not going to say useless. I'm
18 going to say that they do not give you the
19 definitive answer that you want. As we do in
20 many, the preliminary evidence can be suggestive
21 of a possible association that requires further
22 investigation.

23 Q Let me hand you what's been marked
24 as C-5 which is the same exercise, but in regard
25 to salmonellosis, and the same question to you,

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1 next sentence says, "Several geographic clusters
2 of campylobacteriosis occurred during the summer
3 months in Cleveland, Kingfisher, LeFlore,
4 Oklahoma, and Tulsa Counties."

5 A Right.

6 Q Do you have a recollection of that
7 in 2004, sir?

8 A No, I do not.

9 Q Do you know, sir, if there was -- if
10 there's any explanation why there were clusters
11 of campylobacteriosis in these five counties?

12 A No, I do not.

13 Q What does -- and you've used the
14 word "cluster" yourself today. Tell me how you
15 define -- what would constitute a cluster of a
16 disease?

17 A Geographic or temporally focused
18 increased number of cases that were occurring.
19 So over a short period of time or in a certain
20 geographic area, you see a number of cases that
21 occur that make you think that there may be some
22 common association to them.

23 Q When your department receives the
24 data from the counties, is that part of the
25 mission is to be analyzing that data to identify

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1 whether any clusters exist?

2 A Yes.

3 Q And I believe based upon the
4 questions you answered a few moments ago that the
5 department has not identified any cluster at any
6 time related to campylobacter within the Oklahoma
7 counties in the Illinois River Watershed, is that
8 correct?

9 A None that I am aware of. Again,
10 Dr. Bradley may have additional information, but
11 I am not aware that there have been specific
12 outbreaks associated there.

13 Q Sir, would your answer be the same
14 for salmonellosis?

15 A Yes.

16 Q And for E. coli?

17 A Yes.

18 Q The next paragraph on that page,
19 Doctor, it says, "In 2004, cases ranged in age
20 from one day to 92 years with a median age of 28
21 years." The next sentence, "Infants and young
22 children had the highest incidence of
23 campylobacter infections." Doctor, can you
24 explain why infants and young children had the
25 highest incident rate?

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1 abiding by the regulations that attempt to assure
2 safe food practices.

3 Q And I'm going to show you here in a
4 minute some of these inspection reports, and I've
5 noticed that there are a number of them have to
6 do with temperature?

7 A Right.

8 Q Either being cold enough or hot
9 enough. Why is the temperature of the food or
10 the raw product a condition that the health
11 department is interested in?

12 A Well, it either prohibits the
13 replication of organisms in foods that are being
14 stored or it kills those during the cooking prior
15 to serving to patrons.

16 Q These diarrheal organisms that we've
17 talked about today, campylobacter, salmonella,
18 and E. coli, all three of them can be found in,
19 for instance, raw meat or poultry, correct?

20 A Yes.

21 Q Is that one of the reasons that
22 temperatures are to be maintained at a certain
23 elevated level to kill those organisms before
24 they're consumed by human beings?

25 A Yes.

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1 second page of the exhibit, and go down to the
2 inspection at the Cave Springs School Cafeteria
3 on May 13, 2005. Have you found that?

4 A Yes.

5 Q What is the very first deficiency
6 that you see there?

7 A Cross-contamination of raw/cooked
8 foods/other.

9 Q Now, is that an inspection criteria
10 that if violated creates the risk of foodborne
11 illness?

12 A Potentially, yes.

13 Q Deficiencies that indicate that the
14 food service was not maintaining adequate
15 temperatures or holding times, would that
16 increase the risk of foodborne illness?

17 A Potentially it could result in that.

18 Q All right. These inspections
19 illustrate that for a resident of Adair County
20 there are lots of places, there are lots of
21 potential places from which you could contract
22 campylobacteriosis, correct?

23 A It can be contracted through
24 restaurants. If appropriate procedures are not
25 followed, it could occur through restaurants.

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1 Q The same is true for preparing and
2 handling foods at home, correct?

3 A Yes.

4 Q If you were to offer a general
5 statement about foodborne diarrheal conditions,
6 do you have a belief that they are most commonly
7 a product of home food handling procedures or
8 institutional food handling procedures?

9 A I don't know the answer to that. I
10 would think probably home might be a higher risk.
11 I think people probably don't have the same level
12 of training. I would think that, although, you
13 know, there's a lot more food handling obviously
14 that goes on in restaurants, so I'm kind of
15 speculating there.

16 Q In the case of campylobacteriosis,
17 has there been any epidemiological studies
18 performed to identify a dose response?

19 A I am not aware of that, but I just
20 have to say I don't know.

21 Q How about for salmonellosis?

22 A I'm sure with any of these there
23 have been, but I can't cite them for you.

24 Q How about E. coli?

25 A Same answer.

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DIRECT EXAMINATION

BY MR. GEORGE:

Q Dr. Crutcher, my name is Robert George, and you and I have had the pleasure of meeting today for the first time, correct?

A Yes.

Q Okay. You've been with the department if I understand it correctly, the department of health for 12 years now?

A Yes.

Q Do you agree, sir, that the department of health is the lead agency in the state of Oklahoma responsible for protecting human health?

A Yes.

Q When other state agencies in your 12 years of experience in working in state government identify threats to human health, is it common for those agencies to involve the department of health in either investigating or addressing threats to human health?

A Yes.

Q Okay. In your 12 years at the department of health, has anyone at any other state agency asked you or your department to

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1 investigate or assist in the investigation of a
2 human health risk posed by bacteria levels in
3 surface water or ground water in the Illinois
4 River Watershed?

5 A Over the last year, I mean, since
6 the -- I guess the beginning of this issue, we
7 have been involved with the Secretary of the
8 Environment in his role and representatives from
9 the Department of Environmental Quality.

10 Q Let me refine my question a bit,
11 sir. Prior to the initiation of this lawsuit,
12 had the department of health been requested by
13 any other state agency to investigate or assist
14 in the investigation of a human health risk posed
15 by bacteria levels in surface water or ground
16 water in the Illinois River Watershed?

17 A Not to my knowledge.

18 Q And, in fact, sir, is it true that
19 your department was not asked to conduct such an
20 investigation immediately prior to the filing of
21 this lawsuit?

22 A Not a more in-depth -- no. Prior
23 to, I mean, we would ask for information at the
24 time that this began and we were called in to
25 participate, but prior to that, you're saying

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1 were we asked to do anything? No.

2 Q I'll state the question a little
3 more clearly. It was kind of awkward. Did I
4 understand correctly that your agency was not
5 consulted about claims of threats to human health
6 prior to the filing of this lawsuit?

7 A That's true.

8 Q Now, if I understand your testimony
9 thus far, Dr. Crutcher, your department regularly
10 receives at least on a yearly basis public health
11 data about disease incidence from counties
12 throughout the state of Oklahoma, is that
13 correct?

14 A We receive reporting information
15 from all over the state primarily from, again,
16 hospitals, physicians, and in laboratories. The
17 information does not originally come to us from
18 county health departments. It comes from those
19 entities throughout the state in the respective
20 counties.

21 Q Given the reports that have been
22 discussed here today, do I understand correctly
23 that after that data is received from all of
24 those various sources, that one of the things the
25 department of health does is organize it by

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1 county?

2 A Yes.

3 Q Okay. And the county data which
4 your department is the custodian of in terms of
5 public health data includes reported incidences
6 of campylobacteriosis, E. coli, and
7 salmonellosis, is that correct?

8 A Yes.

9 Q And included in the county data
10 would be information from the counties of Adair,
11 Cherokee, Delaware, and Sequoyah Counties,
12 correct?

13 A Yes.

14 Q Now, someone at your department, I
15 assume, you correct me if I'm wrong, actually
16 reviews that data, countywide data, to identify
17 trends or patterns or possible alarming
18 incidences, is that correct?

19 A Yes.

20 Q Okay.

21 A Periodically that is done. We
22 create an annual report so it may be done
23 annually where that's looked at.

24 Q If someone in your department
25 perceives a statistically significant elevation

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1 in a disease incidence in a particular county, do
2 I understand that your department has both the
3 authority and the obligation to investigate those
4 statistically significant elevations in disease?

5 A Yes. I mean, there's no firm
6 guideline as to when that has to take place.
7 It's certainly within -- we have a bit of
8 latitude to, you know, use the knowledge that we
9 have to determine whether we think it is a
10 significant increase in disease to determine
11 whether we launch into an investigation.

12 Q Okay. In your 12 years at the
13 department of health, has your department ever
14 taken any action that you're aware of based on a
15 belief that Adair, Cherokee, Delaware, or
16 Sequoyah Counties were experiencing a
17 statistically significant elevated rate of
18 campylobacteriosis?

19 A No.

20 Q Okay. In your 12 years at the
21 department, has the department of health ever
22 taken any action that you're aware of based upon
23 a belief that Adair, Cherokee, Delaware, and
24 Sequoyah counties were experiencing a
25 statistically significant elevated rate of

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1 salmonellosis? I have a hard time saying that.

2 A No.

3 Q If I ask the same question with
4 regard to E. coli, would your answer be the same?

5 A Yes.

6 Q When information is available to
7 your department, sir, that suggests an imminent
8 and substantial threat to human health, does your
9 department regularly issue warnings or public
10 advisories?

11 A Yes.

12 Q Okay. I noticed in looking through
13 some materials from your website that I've put
14 before you that your department apparently uses
15 its website as you would imagine as a
16 communication vehicle and as a result of that
17 posts its notices on the website, correct?

18 A Yes.

19 Q And I won't ask you to do this. I
20 went through just for 2007 to see how prolific
21 your department had been in issuing notices and I
22 came to about 150. Do you have any reason to
23 disagree with that range in terms of the extent
24 to which your department issues notices informing
25 the public of health risks?

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1 A Notices through the media primarily.

2 Q I only counted the ones on the
3 website.

4 A Yeah. That's certainly within the
5 realm of possible, yeah.

6 Q Okay. And I've put in front of you
7 not just 2007, but prior years going back to
8 2000. It looks to me as though that's a pattern
9 in terms of communication within your department
10 for at least the last seven years, correct?

11 A Yes.

12 Q Okay. In your 12 years at the
13 department, are you aware of the department of
14 health issuing any warnings or public advisories
15 suggesting or informing the public to avoid body
16 contact with the waters in Tenkiller, the
17 Illinois River or its tributaries due to a belief
18 that those waters contained dangerous levels of
19 bacteria?

20 A No.

21 Q In your 12 years at the department
22 of health, are you aware of any warning or public
23 advisories issued by your department advising the
24 public that ground water in the counties that
25 comprise the Illinois River Watershed are not

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1 safe to drink due to a belief that those waters
2 contain dangerous levels of bacteria?

3 A Not to my knowledge.

4 Q What is the RHINO system? Is that
5 acronym familiar to you?

6 A Yeah. It's a reporting system for
7 infectious diseases.

8 Q Who receives the reports on the
9 RHINO system?

10 A The communicable disease area, Lauri
11 Smithee and the people that do the infectious
12 disease investigations.

13 Q Is the RHINO system a vehicle
14 through which the department of health exchanges
15 information with physicians and health care
16 providers?

17 A I probably should -- I think Kristy
18 Bradley can answer that question. I can't tell
19 you the specifics of communication pathways
20 there.

21 Q That's fine. If the department of
22 health were aware of an imminent and substantial
23 threat to human health from exposure of
24 individuals to dangerous levels of bacteria in
25 the waters in Lake Tenkiller, the Illinois River